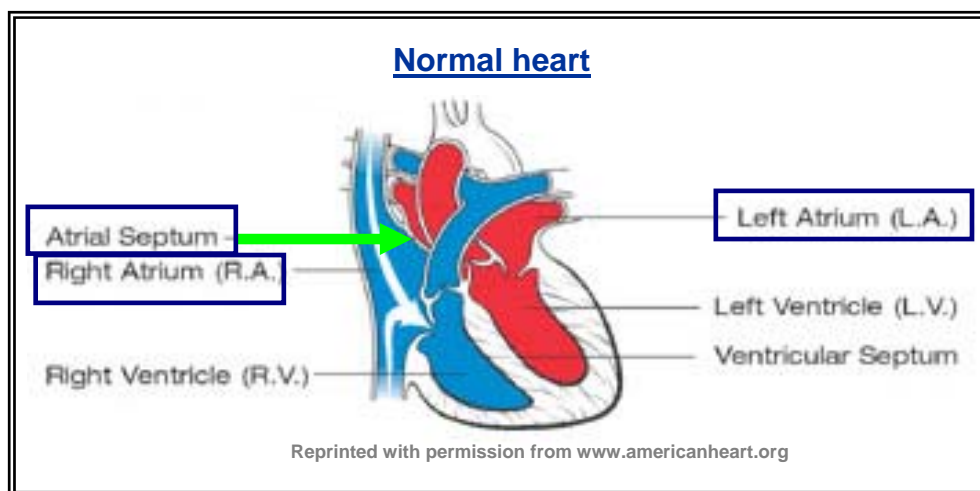


Atrial Septal Defect (ASD)

What are atrial septal defects?

An **atrial septal defect** (ASD) occurs when there is a hole in the **septum** (wall) between the **atria** (two upper chambers of the heart). When a "hole" is present between the atria, some oxygen-rich blood leaks back to the right side of the heart and goes back to the lungs. Because of this, there is a significant increase in the blood that goes to the lungs. There are three types of ASDs (ostium secundum, ostium primum, and sinus venosus); the name of each type of ASD describes when the hole occurred during the heart's development. Approximately 5 – 10% of all children born with a congenital (present at birth) heart defect are born with an ASD.

Normally, there is another hole called the **foramen ovale** present in the atrial septum during development. The foramen ovale typically closes after birth; however, in a small portion of the population, the foramen ovale does not close. This is called a **patent** (open) **foramen ovale** and usually does not cause significant medical problems.



What causes ASDs?

Currently, the exact cause of ASDs is not known. Heredity likely plays a role in the development of all heart defects, meaning that if someone had a congenital heart defect, he or she has an increased chance of having a child with a heart defect.

How are ASDs treated?

ASDs can range widely in size. Smaller ASDs may close on their own; larger ASDs may require correction through catheterization or surgery. Your child's doctor(s) will discuss appropriate treatment options with you. Without treatment, other medical problems may develop, including lung disease, abnormal heart rhythms, and an increased risk for stroke.

For more information

American Heart Association - <http://www.americanheart.org/presenter.jhtml?identifier=11105>

Cincinnati Children's Hospital Medical Center's Heart Center Encyclopedia –
<http://www.cincinnatichildrens.org/health/heart-encyclopedia/default.htm>

MedlinePlus - <http://www.nlm.nih.gov/medlineplus/congenitalheartdefects.html>

National Heart Lung and Blood Institute - http://www.nhlbi.nih.gov/health/dci/Diseases/chd/chd_what.html

Sources: Cincinnati Children's Hospital, National Heart Lung and Blood Institute